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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/410,644 | 10/01/1999 | RALPH SOMMERER | 1018.012US1 | 7189 |

27195 7590 06/27/2003

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| EXAMINER |
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STONE, JONATHAN D

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| ART UNIT | PAPER NUMBER |
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2178

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/410,644

Applicant(s)

SOMMERER, RALPH

Examiner

Jonathan D Stone

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to communications: Amendment A filed on 5/22/03.
2. Claims 1-18 are pending in the case. Claims 1, 7, 9, 10, 14, and 15 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edel et al (USPN 4891771—filing date 12/18/1987) in view of Truelson (USPN 6223191—filing date 2/12/1998).

4. **Regarding independent claim 1**, Edel discloses balancing text on a page. He does not explicitly disclose performing the balancing without forcing any text off the page. However, Truelson teaches modifying a page's text format while prohibiting the movement of text to a new line by limiting the text a certain number of lines (col 2, ln 38-47). Truelson also teaches outputting the page (figure 1, col 2:ln 65-67, and col 4:ln 27-39). The implementation of the invention in a word processor brings with it functions such as displaying, storing, and printing a file, among others. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Edel to include the teachings of Truelson. Prohibiting the movement of words to other lines or pages would have given a user better means to choose and balance a selection while limiting it to a chosen area. Including a means of output would

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have provided the obvious benefit of enabling a user to interface with the invention, see the results, and use the invention for further modifications.

5. **Regarding claim 2-3**, the claims incorporate substantially similar subject matter as covered in the rejection of claim 1, and are rejected along the same rationale. Please reference the rejection of the claim limitation “*outputting the page.*”

6. **Regarding claim 4**, Truelson teaches formatting by considering groups of words at a time, where a group is more than a single line. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Truelson’s invention so that the groups were a pair of lines and were considered in a rolling manner. This would have given the invention the advantage of a line-by-line analysis to better the document’s readability by determining the effects of modifying the format of one line.

7. **Regarding claim 5**, Truelson teaches moving a word to a subsequent line based on the predetermined criteria of a minimum number of lines (col 2:ln 40-49). Truelson also teaches a method that creates permutations of formatted texts, weighing each permutation and pruning them based on the weighted score as well as the predetermined criteria of the minimum number of lines and letterspacing threshold (col 2: ln 50-64).

8. **Regarding claim 6**, Edel and Truelson do not explicitly teach determining if a first line is less than a second in length. However, Truelson teaches a method that determines if a first line

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has met a prespecified threshold of letterspacing (figure 4 and col 8: ln 21-38). If the limits are not exceeded, another word segment is removed from the line for placement on the subsequent line. Truelson also teaches using a data structure containing information from which one can extract a line length (col 7: ln 56-58). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Truelson's invention allow for the comparison between the data structure information of two lines. The comparison would have provided another means of determining if a word segment should be moved from a line, as were determined by the letterspacing threshold means described.

Truelson teaches creating permutations of a word group being analyzed to determine the most favorable formatting. A maximum fit algorithm is run to determine the minimum number of lines required for the word group (col 5: ln 61-67). This number is used to prune permutations that exceed the minimum amount of lines (col 2: 54-60). Thus, in this way, it is determined if a word from a first line would fit on a second line.

Truelson teaches a method of pruning formatted permutations based on predetermined criteria, such as a minimum number of lines and a letterspacing threshold, as well as a weighted score calculated from a predetermined equation (col 2: 51-60 and col 6: ln 60 – col 7: ln 13).

Truelson teaches choosing a permutation, which may contain a word moved from a first line to a second line (col 8: 25-28), that has the most desirable weighted score (col 2: 60-34).

9. **Regarding claim 7**, the claim incorporates substantially similar subject matter as claims 1, 4, and 5, and is rejected along the same rationale.

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10. **Regarding claim 8**, the claim incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.

11. **Regarding claim 9**, the claim incorporates substantially similar subject matter as claims 1, 4, and 6, and is rejected along the same rationale.

12. **Regarding claims 10, 11, 12, and 13**, the claims incorporate substantially similar subject matter as claims 1, 4, 5, and 6, respectively, and are rejected along the same rationale.

13. **Regarding claim 14**, the claim incorporates substantially similar subject matter as claim 9, and is rejected along the same rationale.

14. **Regarding claim 15**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale. Furthermore, Truelson teaches the implementation of the method in a system including a processor *102* and a memory *155*.

15. **Regarding claims 16, 17, and 18**, the claims incorporate substantially similar subject matter as claims 4, 5, and 6, and are rejected along the same rationale.

Response to Arguments

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16. Applicant's arguments filed 5/22/03 in Amendment A have been fully considered but are not persuasive.

17. Applicant argues in paragraph 2 of page 9 in Amendment A that the combination of Edel and Truelson do not teach the claimed limitations, further refuting that either Edel or Truelson teach or suggest balancing a page of at least text without forcing any of the text onto a previous page or a next page. Although both Edel and Truelson teach text balancing methods that allow text to be moved from one page to another page, neither reference precludes implementation using text of length less than one page. In such a case that the text does not span multiple pages or is of such length as to not require any movement of text to a different, the combination of Edel and Truelson do read on the instant invention as claimed. The text is balanced according to the referenced inventions without forcing any of the text onto a previous or next page. Accordingly, independent claims 1, 7, 9, 10, 14, and 15 and dependent claims 2-6, 8, 11-13, and 16-18 remain rejected as described above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan D Stone whose telephone number is (703) 305-7854.

The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R Herndon can be reached on (703) 308-5186. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications. Responses to this action may be mailed to:

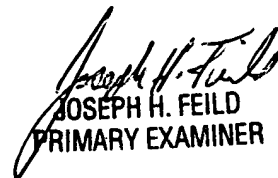
Commissioner of Patents and Trademarks
Washington, D.C. 20231

Hand-delivered responses should be brought to:

Crystal Park II, 2121 Crystal Drive
Arlington, VA, Fourth Floor (receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

JDS
June 20, 2003


JOSEPH H. FEILD
PRIMARY EXAMINER